

541409

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
22 July 2004 (22.07.2004)

PCT

(10) International Publication Number  
**WO 2004/062291 A1**

(51) International Patent Classification<sup>7</sup>: **H04N 7/24**, 7/32,  
7/26, 7/46, 7/52, 7/01, 5/44

(21) International Application Number:  
PCT/IB2003/006167

(22) International Filing Date:  
19 December 2003 (19.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0300361.3 7 January 2003 (07.01.2003) GB

(71) Applicant (for all designated States except US): **KONIN-  
KLJKE PHILIPS ELECTRONICS N.V.** [NL/NL];  
Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **SALOMONS, Ed-  
uard, W.** [NL/IE]; c/o Philips Intellectual Property &  
Standards, Cross Oak Lane, Redhill, Surrey RH1 5HA  
(GB).

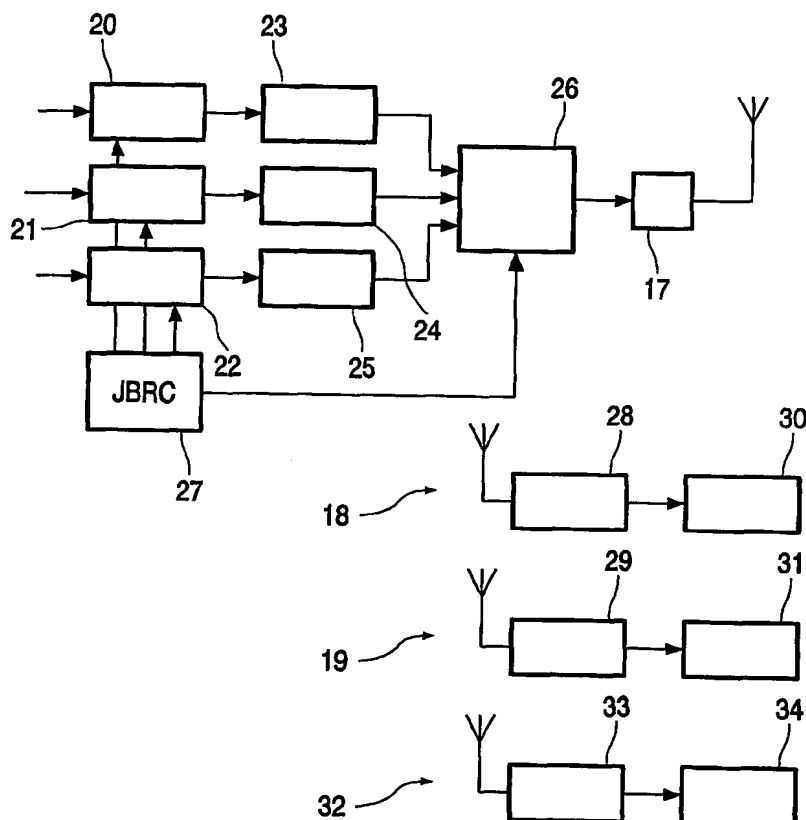
(74) Agent: **WHITE, Andrew, G.**; Philips Intellectual Prop-  
erty & Standards, Cross Oak Lane, Redhill, Surrey RH1  
5HA (GB).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR,  
CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,  
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,  
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,  
MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU,  
SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,  
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (BW, GH,  
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: AUDIO-VISUAL CONTENT TRANSMISSION



(57) Abstract: An in-home audio-visual transmission system comprises a gateway 15, having for example three input channels. On each channel is a transcoder 20-22 and a buffer 23-25. At each of three destination stations 18, 19, 32 is included a buffer 28, 29, 33 and a decoder 30, 31, 34. The system aims to provide in respect of each channel a predetermined buffering delay, which is distributed between the gateway 15 and the relevant receiver. Following a channel-change, switch-on or similar condition, the buffer for a channel is empty. Following such an event, reduced speed playback is effected at the destination station, which allows playback to be effected whilst the buffer fullness is increased. Reduced speed playback is preferably effected by inclusion in the transcoders 20-22 of means for including in an MPEG2 stream time stamps which result in the repetition of fields at the destination stations. Audio signals may be subjected to frame repetition so as to avoid a reduction in pitch.

WO 2004/062291 A1



Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,  
SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA,  
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— with international search report

— before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments

*For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.*